

New York Sea Grant 2012 NSGO Review

Jonathan Eigen

NYSG Management Team in 2011 and current

- Management Team Members (name, position, FTE)
 - Dr. James Ammerman, Director (1.0 FTE)
 - Dr. Katherine Bunting-Howarth, Associate Director and Extension Leader (1.0 FTE)
 - Cornelia Schlenk, Assistant Director (1.0 FTE)
- Size of program: Large

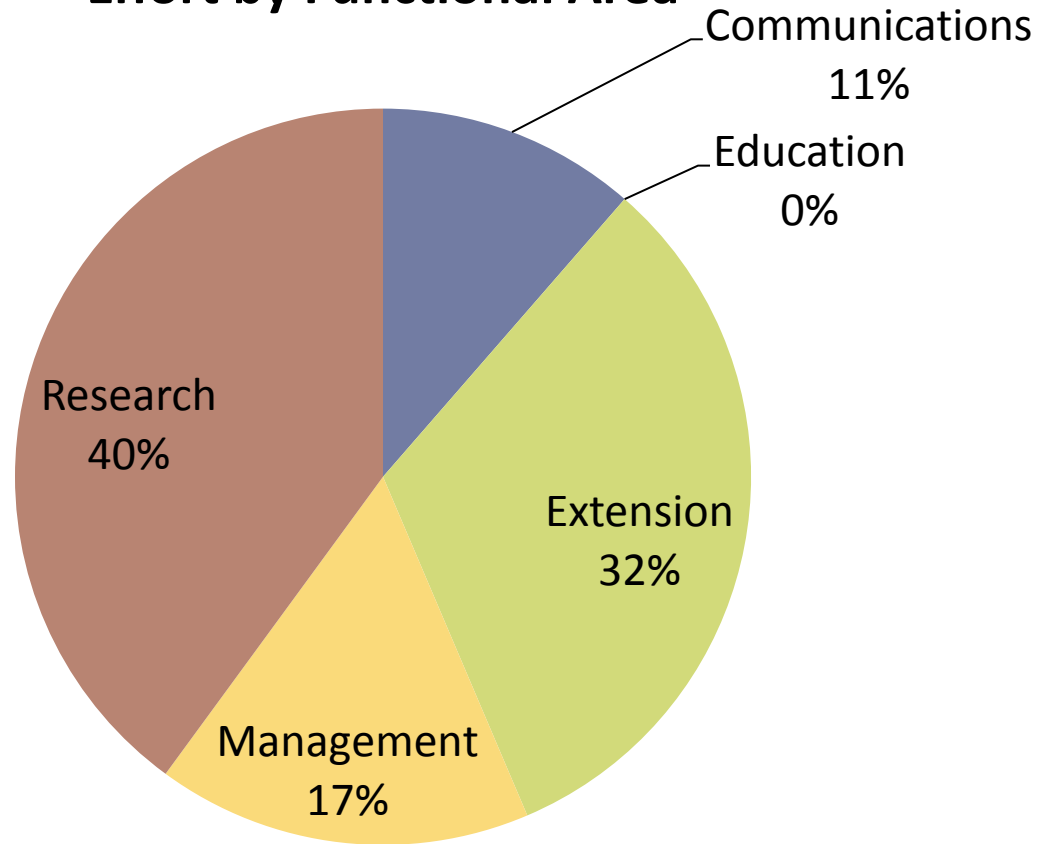
NYSG Personnel

- Total FTEs (information in 2010 Annual Report metrics)

Functional Area	# of individuals	# of FTEs supported by SG	# of FTEs supported by match/leverage
Mgt/Administration	6	3.5	2
Communications	4	1	2
Extension	22	5.4	10.75
Education	7	.4	4.4
Research	81	16.6	10.53

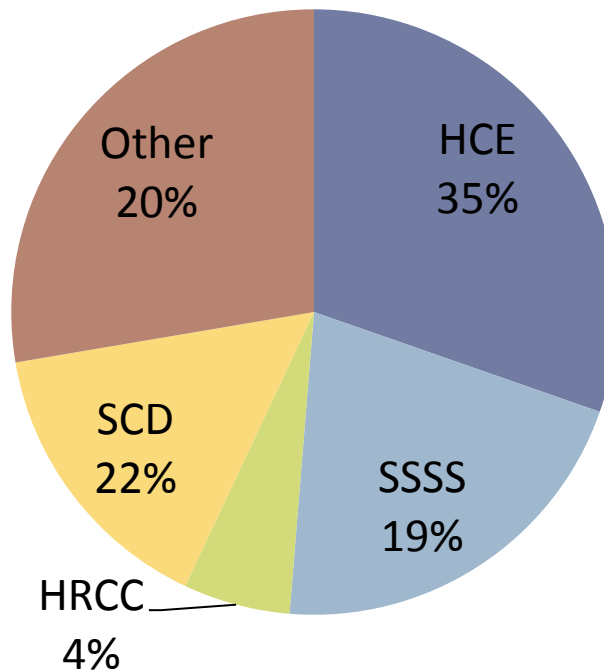
NYSG 2010 Core Budget towards each Functional Area (federal dollars+Match)

Effort by Functional Area



NYSG 2010 Budget towards each Focus Area (Fed+Match+Passthrough+Leveraged)

Effort by Focus Area



Significant NYSG Changes (since January 2011)

- Dr. Katherine Bunting-Howarth, Associate Director, started in April 2011 replacing Dale Baker (retired January 2009)
- Robert Kent (marine district extension) retired, position vacant
- Charles O'Neill (Great Lakes extension) retired (but still works with NYSG on AIS as a part-time Cornell Cooperative Extension employee), position vacant
- I FISH NY contract expired March 2011, had supported 3 FTE
- Mary Penney became CCD Specialist March 2011
- Support staff positions for Administration and Communications each reduced by 0.5 FTE

NYSG Research RFP Process for 2012-2013

- Pre-Proposal Review – 3 concurrent steps
 - a) Internal review by extension staff
 - b) Review by academic researchers (Technical Panel): 3 out of state, 4 from Program Advisory Council (PAC)
 - c) NYSG Stakeholder PAC reviews for need and relevance
 - d) One session held jointly for b and c to have a combined discussion
- Management Team reviews all input and makes final recommendations for encouraging full proposals
- Extension review and PAC review (optional) of full proposals
- Mail peer reviews secured for full proposals
 - Masked peer reviews shared with PIs, limited responses accepted
 - Science Technical Panel reconvened 4 of 7 original members and 3 new members for increased expertise on the suite of proposals
 - Proposals rated with a 5-category scale
- Management Team makes final decisions on funding

NYSG RFP Process for 2012-2013 Projects – Research Metrics

Core Proposals	# of Proposals	# of Institutions	# from home institution (SBU, location of admin offices)
Pre-Proposals Submitted	38	30	15
Full Proposals Submitted	16	22	5
Proposals Funded	9	11	4

NYSG Contribution to National Performance Measures and Metrics

Focus Area	Metric	Actual	Anticipated Target	National Target
HCE	Number of tools, technologies, and information services that are used by NOAA partners/customers to improve ecosystem-based management	3	6	37
HRCC	Number of coastal communities that have adopted or implemented hazard resiliency practices to prepare for and respond to/minimize coastal hazardous events.	7	7	126

Contribution to National Performance Measures and Metrics

Focus Area	Metric	Actual	Anticipated Target	National Target
SAFE AND SUSTAINABLE NEW YORK SEAFOOD SUPPLY	Number of food processing, distribution or warehouse firms will participate in Internet-based training programs on current Good Manufacturing Practices managed by New York Sea Grant that will enable them to more effectively manage the conditions and practices in their facilities that could affect the safety of their products.	140	200	

NYSG Impacts #1 of 5

- East Coast Winter Storm Climatological and Forecasting Data Web site
 - New York Sea Grant worked with NOAA's Northeast Regional Climate Center at Cornell University
 - Sea Grant assembled a team of coastal managers and emergency personnel to help guide Web site design
 - Provides: seasonal forecasts of storm activity, historical storm data, access to sites providing real-time environmental measurements
 - Automatically matches forecasted storms with the most similar historical events and provides information on the impacts of these events
 - Two municipalities used information from the site to obtain \$1 million for storm damage restoration and mitigation projects.

Focus Area: Hazard Resilience in NY Coastal Communities

NYSG Impacts #2 of 5

- Helping Local Leaders Understand Hudson River Shoreline Environments
 - Municipal officials from communities along the Hudson River need information to understand how climate change may impact the River's water levels.
 - NYSG is part of the Hudson River Research Reserve's Shorelines Project Team.
 - NYSG served on the planning committee and participated in a National Sea Grant Law Center-sponsored Pace University Land Use Law Center training program.
 - Approximately 40 Hudson Valley community leaders residing and working in the counties directly bordering the Hudson River (from Albany south to Rockland County) participated in the four-day workshop.

Focus Area: Hazard Resilience in NY Coastal Communities

NYSG Impacts #3 of 5

- NYSG Training Extension and Agencies in Climate Change
 - Extension educators, from Land Grant and Sea Grant programs, needed expertise in climate change to accurately communicate with their audiences.
 - With funding from NOAA Climate Change Adaptation Initiative, NYSG organized a 2-day climate literacy workshop for 42 extension educators offering programming in natural resources, agriculture, consumer education and youth education, and for staff from the National Weather Service.
 - Evaluations indicate that the workshop was highly successful in meeting audience needs and the audience committed to:
 - Integrate the workshop information into their existing curricula, relay information directly to colleagues, develop companion workshops and establish a Statewide Climate Change Program Work Team.
 - NY extension educators are now better positioned to develop clearly focused climate change materials.

Focus Area: Hazard Resilience in NY Coastal Communities

NYSG Impacts #4 of 5

- New York Commercial Fishing Fleet Practices Safety-At-Sea
 - 60 commercial fishermen and fisheries biologists attended a one-day Safety-At-Sea workshop co-sponsored by NYSG
 - Captains and crew members who attended this one-day training learned about cold water survival strategies, practiced safety drills, donned immersion suits, deployed distress signals and a full size inflatable life craft, extinguished mock engine room fires, and learned about other damage control techniques
 - Through donations by LIOHEC, 15 commercial fishermen received new state-of-the-art personal flotation devices (PFDs) and one fisherman received a new immersion suit.
 - Received awards from the U.S. Coast Guard and an Extension Award from the Northeast Sea Grant Consortium

Focus Area: Safe and Sustainable New York Seafood Supply

NYSG Impacts #5 of 5

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Influence of ocean exchange on nutrients, plankton assemblages, submerged aquatic vegetation and shellfish within Long Island's South Shore Estuaries

- Barrier island breaches caused by hurricanes and other storm events are periodic occurrences on Long Island's south shore and each event has an effect on water quality and marine life.
- Ocean inlets bring colder and saltier water into the south shore bays and inlets have a lower concentration of phytoplankton than the bays.
- Clear water near the inlets allowed eelgrass to grow, but due to lower levels of phytoplankton, the hard clams' growth and condition index was decreased compared to hard clams in back-bay locations.

NYSG Impacts #5 of 5 (cont'd)

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Influence of ocean exchange (cont'd)

- The impact of breaches on eelgrass would be clearly positive; the impact on hard clams seems to be mixed.
- Results used toward the management of Shinnecock Bay and its watershed by the Town of Southampton specifically regarding watershed development plans and the placement of seed hard clams.
- Research findings have led to a new hypothesis, leading toward further funded research.

Focus Areas: Healthy Coastal Ecosystems, Sustainable Coastal Development

NYSG 2010 Research Accomplishments #1 of 2

Wave Forecasting for Long Island Waters

- Developed an operational forecasting system of near shore wave conditions for Long Island, NY coastal waters and was coupled with a storm surge model to improve water level predictions along the coast of Long Island.
- Research highlights the role of edge waves in rip current generation and the utility of an integrated monitoring program to increase the understanding of rip current processes.
- Technologies developed as part of a research project funded by Sea Grant have improved near shore wave field forecasts and will lead to improved storm surge forecasts.

NYSG 2010 Research Accomplishments #2 of 2

Ecogenomics of *Aureococcus anophagefferens* (brown tide alga)

- Members of the *Aureococcus* Genome Consortium compared the genome with other phytoplankton inhabiting the estuaries where *Aureococcus* blooms.
- They found *Aureococcus* shows genome-encoded advantages over other marine phytoplankton and is genetically predisposed to exploit certain characteristics of human-modified coastal ecosystems.
- *Aureococcus* possesses more genes involved in nutrient acquisition and metabolism and light capture than competing phytoplankton, which may allow it to grow rapidly and out compete other marine phytoplankton.
- The ecogenomics approach of applying molecular and environmental techniques provides useful tool for understanding HABs in different ecosystems. Approach embraced by DOE Joint Genome Institute.